

## **REMARKS**

In the Official Action mailed on **1 July 2005**, the Examiner reviewed claims 1-15, 17-29, and 31-36. Claim 31 was objected to because of informalities. Claims 17-29 were rejected under 35 U.S.C. §101 because the claimed invention is directed to non-statutory subject matter. Claims 31 and 34 were rejected under 35 U.S.C. §101 because the claimed invention is directed to non-statutory subject matter. Claims 32 and 35 were rejected under 35 U.S.C. §101 because the claimed invention is directed to non-statutory subject matter. Claims 33 and 36 were rejected under 35 U.S.C. §101 because the claimed invention is directed to non-statutory subject matter. Claims 1-15, 17-29 and 31-36 were rejected under 35 U.S.C. §102(b) as being anticipated by Srinivasan (USPN 5,799,309, hereinafter "Srinivasan").

### **Objections to the claims**

Claim 31 was objected to because of informalities.

Applicant has amended claim 31 to correct the informalities noted by the Examiner.

### **Rejections under 35 U.S.C. §101**

Claims 17-29 were rejected because the claimed invention is directed to non-statutory subject matter.

Applicant has amended claims 17-29 to clarify that the invention is directed to a computer system. These amendments find support in the paragraph starting on page 17, line 27 of the instant application as amended (see Amendments to the Specification above and the second paragraph below).

Claims 31 and 34 were rejected because the claimed invention is directed to non-statutory subject matter.

Applicant has amended the paragraph starting on page 17, line 27 to remove the non-tangible embodiments of the computer media.

Claims 32 and 35 were rejected because the claimed invention is directed to non-statutory subject matter.

Applicant has canceled claims 32 and 35 without prejudice.

Claims 33 and 36 were rejected because the claimed invention is directed to non-statutory subject matter.

Applicant has amended claims 33 and 36 to clarify that the computer program product is executed within a computer system. These amendments find support in the paragraph starting on page 17, line 27 of the instant application as amended.

#### **Rejections under 35 U.S.C. §102(b)**

Independent claims 1, 10, 17, 24, 31, 33-34, and 36 were rejected as being anticipated by Srinivasan.

Applicant respectfully points out that Srinivasan **requires merging and/or sorting** of database query results that were generated using multiple database queries (see Srinivasan, FIGs. 8, 9, 10, 12, 13, col. 12, lines 26-28). This is why the invention of Srinivasan requires a “gateway” module that, among other things, performs merging and sorting operations (see FIG. 1, 106, col. 12, lines 26-28).

In contrast, the present application **does not require merging or sorting** of database query results. Specifically, the present invention uses an expression tree combiner to combine the source expression trees and the target expression trees into a combined expression tree. This combined expression tree is then used to generate a retrieval query which directly retrieves all the relevant data from the database without requiring merging and/or sorting operations. (See page 10, lines 16-21, page 14, line 4 through page 15, line 31.)

Note that obviating the need for merging and sorting operations is advantageous because it reduces the amount of computation required to process

the database query. Furthermore, the systems and techniques to obviate merging and sorting operations are not obvious. Specifically, the present invention obviates the need for merging and/or sorting operations by using the complex but computationally-efficient operations described in FIG. 6 and on page 14, line 4 through page 15, line 31 (e.g., combining the source and the target expression trees).

Accordingly, Applicant has amended independent claims 1, 10, 17, 24, 31, 33-34, and 36 to clarify that the retrieval query is generated by: obtaining a source expression tree relating to the collection of the source objects; building a target expression tree defined by the many-to-many mapping including a join between the target tables and the join table; combining the source expression tree and the target expression tree to produce a combined expression tree; and generating the retrieval query based on the combined expression tree. These amendments are supported on page 14, line 4 through page 15, line 31. Furthermore, Applicant has canceled claims 3, 15, 18, and 19 without prejudice.


Hence, Applicant respectfully submits that independent claims 1, 10, 17, 24, 31, 33-34, and 36 as presently amended are in condition for allowance. Applicant also submits that claims 2, 4-9, which depend upon claim 1, claims 11-14, which depend upon claim 10, claims 20-23, which depend upon claim 17, and claims 25-29, which depend upon claim 24, are for the same reasons in condition for allowance and for reasons of the unique combinations recited in such claims.

**CONCLUSION**

It is submitted that the present application is presently in form for allowance. Such action is respectfully requested.

Respectfully submitted,

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